

5 NOTE: The dummy LLC PDU is a UI frame with C/R = 1, which is a command in SGSN to MS direction and a response in the MS to SGSN direction. The SAPI is 3, which is User Data 1. The LLC sequence number N(U) is 0. Encryption is not enabled. The PM bit is 1, which indicates that the LLC header is protected by the LLC FCS. No matter how many of the octets are included in the dummy LLC PDU, the FCS is either not present or is invalid, which invalidates the entire LLC PDU. The information field contains the hexadecimal value 2B, which is the preferred fill pattern for 10 optimizing the air interface physical layer performance.

Bit							
8	7	6	5	4	3	2	1
PD=0	C/R=1	0	0	SAPI=3			Octet 1
1	1	D=0	0	0	N(U) =0		Octet 2
N(U) =0					E=0	PM=1	Octet 3
0	0	1	0	1	0	1	1
0	0	1	0	1	0	1	1
0	0	1	0	1	0	1	1
...							
0	0	1	0	1	0	1	1
0	0	1	0	1	0	1	1

15 While the invention has been particularly shown and described with reference to a particular embodiment, it will be understood by those skilled in the art that various changes in form and details may be made therein without departing from the spirit and scope of the invention and it is intended that all such changes come within the scope of the following claims:

What is claimed is:

1. A method for data transmission within a wireless communication system, the method comprising the steps of:
  - transmitting data over a wireless data channel at a data rate;
  - determining that no more data needs to be transmitted; and
  - 5 delaying dropping the data channel for a time period based on the data rate.
2. The method of claim 1 wherein the step of transmitting data over the wireless data channel comprises the step of transmitting data over a Code Division Multiple Access (CDMA) Supplemental Channel.  
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3. The method of claim 1 wherein the step of delaying dropping the data channel for a time period based on the data rate comprises the step of delaying dropping the data channel for a time period, wherein the time period is proportional to the data rate.  
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4. A method for data transmission within a Code Division, Multiple Access (CDMA) wireless communication system, the method comprising the steps of:

- operating a data transmitter in a CDMA Active state;
- determining that no more data needs to be transmitted over a CDMA supplemental channel;
- 5 prior to operating the data transmitter in a Control Hold state, delaying transition to the Control Hold state for a period of time, wherein the period of time is based on a data rate; and
- operating the data transmitter in a Control Hold state.

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5. The method of claim 4 wherein the step of operating the data transmitter in the CDMA Active state comprises the step of transmitting via a dedicated control channel and a CDMA supplemental channel.

15 6. The method of claim 5 wherein the step of operating the data transmitter in the Control Hold state comprises the step of transmitting via a dedicated control channel only.



7. An apparatus comprising:
  - channel circuitry for transmitting data; and
  - a timer coupled to the channel circuitry, wherein the timer delays deactivation of the channel circuitry after data transmission for a period of time, wherein the period of time is based on a data rate.
8. The apparatus of claim 7 wherein the period of time is proportional to the data rate.
- 10 9. The apparatus of claim 7 wherein the channel circuitry comprises CDMA fundamental channel circuitry.

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10. A method for data transmission within a wireless communication system, the method comprising the steps of:

transmitting data to a first receiver over a first plurality of frames on a data channel, wherein the first plurality of frames are assigned to the first  
5 receiver;

transmitting data to the first receiver, over a frame on the data channel for a period of time, wherein;

the frame is assigned to a second receiver;

the frame is not part of the first plurality of frames;

10 the period of time is based on a time to transfer from a hold state to an

active state; and

transmitting second data to a second receiver over the frame.

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11. A method for data transmission within a wireless communication system, the method comprising the steps of:

receiving data via a first receiver from over a first plurality of frames on a data channel, wherein the first plurality of frames are assigned to the first receiver;

5 receiving data via the first receiver, over a frame on the data channel for a period of time, wherein;

the frame is assigned to a second receiver;

the frame is not part of the first plurality of frames; and

10 the period of time is based on a time to transfer from a hold state to an active state.

12. An apparatus for data transmission within a wireless communication system, the apparatus comprising:

means for transmitting data over a first plurality of frames on a data channel, wherein the first plurality of frames are assigned to the first receiver;

5 means for transmitting data over a frame on the data channel for a period of time, wherein;

the frame is assigned to a second receiver; and

the frame is not part of the first plurality of frames.

13. A method for data transmission within a General Packet Radio Service (GPRS) communication system, the method comprising the steps of:

establishing a temporary block flow (TBF) between a transmitting device and a receiving device to transmit data over a data channel;

5 determining that no more data needs to be transmitted to the receiving device; and

delaying termination of the TBF by transmitting dummy data over the data channel.

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14. A base station or a mobile unit comprising:
  - means for establishing a temporary block flow (TBF) between a transmitting device and a receiving device to transmit data over a data channel;
  - means for determining that no more data needs to be transmitted to the receiving device; and
  - means for delaying termination of the TBF by transmitting dummy data over the data channel.